

Title (en)
APPARATUS AND METHOD FOR DIRECTIONAL DRILLING

Title (de)
VORRICHTUNG UND VERFAHREN ZUM RICHTBOHREN

Title (fr)
APPAREIL ET PROCEDE UTILISES POUR LE FORAGE DIRECTIONNEL DE TROUS

Publication
EP 1272728 B1 20061213 (EN)

Application
EP 01921613 A 20010417

Priority
• GB 0101735 W 20010417
• GB 0009008 A 20000413

Abstract (en)
[origin: WO0179649A2] An apparatus (1) for the directional drilling of a bore hole through a solid substrate includes a main bore head (2) mounted for rotation on a flexible drive shaft (10) and a pilot bore head (4) for weakening a region of substrate in advance of the main bore head, the weakened region being eccentrically located relative to the main bore head. The apparatus further includes means for enabling the drilling access of the main bore head, during subsequent drilling of the bore hole, to become substantially aligned with the weakened region of substrate.

IPC 8 full level
E21B 7/00 (2006.01); **B28D 1/14** (2006.01); **E21B 7/06** (2006.01); **E21B 7/08** (2006.01); **E21B 10/32** (2006.01)

CPC (source: EP US)
B28D 1/146 (2013.01 - EP US); **E21B 7/064** (2013.01 - EP US); **E21B 7/067** (2013.01 - EP US); **E21B 10/26** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0179649 A2 20011025; **WO 0179649 A3 20020523**; AT E348240 T1 20070115; AT E497083 T1 20110215; AU 4858401 A 20011030; DE 60125160 D1 20070125; DE 60125160 T2 20071025; DE 60143973 D1 20110310; EP 1272728 A2 20030108; EP 1272728 B1 20061213; EP 1691030 A1 20060816; EP 1691030 B1 20110126; GB 0009008 D0 20000531; US 2003089527 A1 20030515; US 2004222024 A1 20041111; US 6880648 B2 20050419; US 6880649 B2 20050419

DOCDB simple family (application)
GB 0101735 W 20010417; AT 01921613 T 20010417; AT 06010654 T 20010417; AU 4858401 A 20010417; DE 60125160 T 20010417; DE 60143973 T 20010417; EP 01921613 A 20010417; EP 06010654 A 20010417; GB 0009008 A 20000413; US 24090702 A 20021004; US 86633104 A 20040610